CAMS Project



NOAA/CAMS CFS Implementation Identify Vendors for Non-CFS Documents Program Module (FINAL)

Version 2.1

Prepared by Accenture for

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1 <u>Introduction of Task</u>

1.1 Naming Standards

The Identify Vendors for Non-CFS Documents Program Module adheres to the latest version of the CAMS Support Center (CSC) Programming Standards and Guidelines.

Throughout this document suggested names of objects are consistently formatted in order to make it easier to distinguish what type of object is being referred to in the design. The following table is a list of each object in this document and its corresponding format.

<u>Object</u>	<u>Description</u>
SCREENS Field Names TABLES Column Names FILES variables	Named in all caps and italics Named in italics with the first letter of each word capitalized Named in all caps and bold Named in bold with the first letter of each word capitalized Named in all caps and underlined Named in all lowercase and underlined

1.2 Purpose of Task

The purpose of this module is to identify and validate vendors associated with open documents in the National Oceanic and Atmospheric Administration (NOAA) financial management system (FIMA) <u>ACTIVE DOCUMENT STATUS</u> File (ACTDOC). It identifies and validates vendors for FIMA open documents with **Document Types** "01" - "49" that have not yet been converted into CFS. This module runs once the reconciliation of existing CFS Production open documents is complete.

The module has two distinct processing paths: one for documents that are associated with vendors from Federal agencies; and one for documents that are associated with Non-Federal vendors. Each path identifies the vendor data associated with open documents by retrieving the FIMA document data from the **Convert ACTDOC** tables (**CONV_ACTDOC** and **CONV_ACTDOC_ACCOUNT**), and validates the identified vendors against data in CFS. If the identification and validation are successful, the document's record in the **Convert ACTDOC** tables is updated to reflect that a valid vendor has been found.

1.3 Process Flow for the Identify Vendors for Non-CFS Documents Program Module

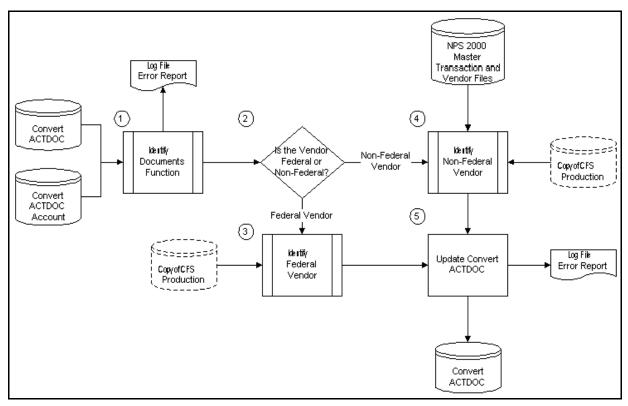


Figure 1. Identify Vendors for Non-CFS Documents Process Flow

The Identify Vendors for Non-CFS Document Program Module begins by selecting all unconverted FIMA accounts payable open documents on the **Convert ACTDOC** tables in the Identify Document Function and checks that a valid vendor purchase and/or payment address is available for the document (Step 1). The module then determines if the vendor is Federal or Non-Federal (Step 2). The Identify Federal Vendor Function queries a copy of CFS Production to retrieve the valid data for the vendor (Step 3) based on the document's **Country Code**. The Identify Non-Federal Vendor Function queries the NPS 2000 Master Transaction and Vendor Files, using the **Terminal Code**, **Document Type**, and **Document Number**, to retrieve the vendor data and validate that data against a copy of CFS Production (Step 4). The module updates a flag on the **Convert ACTDOC** table (**CONV_ACTDOC**) for each document that has an associated vendor successfully identified and validated in Steps 3 or 4 (Step 5).

- 1.4 Business Rules for the Identify Vendors for Non-CFS Document Program Module
 - 1 Obligation and invoice documents require a valid vendor.
 - 2 Matched obligation and invoice documents can only have one CFS Vendor Number, meaning that only one unique CFS identification number is allowed per document. Only documents with a single **Country Code** or **Terminal Code** (two variables which help determine the vendor associated with the document) can be validated by this module.
 - 3 The CFS PURCHASE ORDER TRANSACTION SCREEN (FM040) and the ESTIMATE ACCRUAL TRANSACTION SCREEN(PM050) require a valid purchase address.
- 1.5 Input to the Identify Vendors for Non-CFS Document Program Module

The initial input for this module is unconverted FIMA accounts payable open documents, including CFS-initiated accounts payable open documents that cannot be reconciled to FIMA ACTDOC. These documents will have a value of 'N' in the CFS_Match_Flag column on the CONV_ACTDOC table. Information from each document selected is used to determine the vendor associated with the document. The identification and validation process requires input that can be used to determine the vendor's data from the open document such as the Government Code, Country Code, Terminal Code, Document Type and Document Number. If the vendor's data is correctly located in the input for the document, then the vendor is identified and validated. The input needed for the vendor's identification and validation come from files out of NPS 2000 and the Copy of CFS Production.

- 2 <u>Identify Documents Function (Function 1)</u>
- 2.1 Purpose of the Identify Documents Function

The Identify Documents Function, which encompasses Steps 1 and 2 of the module's process flow from Section 1.3, determines which documents on the **Convert ACTDOC** tables need to have vendors identified and validated in order for them to be converted to CFS Production. After making that determination, it sorts the selected documents and sends them one by one to either the Identify

Federal Vendor Function (Function 3) or the Identify Non-Federal Vendor Function (Function 4) for future processing. If the function should find any documents with incomplete or invalid vendor information, those documents are updated as failing validation on the **Convert ACTDOC** tables and logged as errors.

2.2 Process Flow of the Identify Documents Function

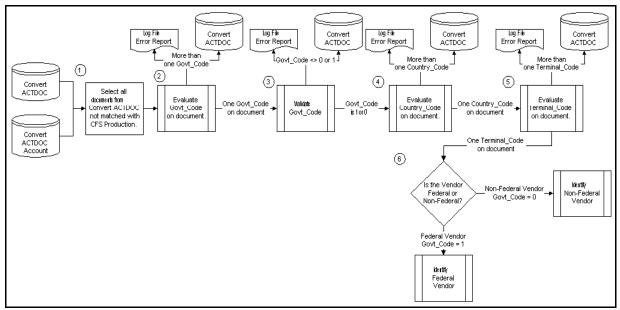


Figure 2. Identify Documents Function Process Flow

The Identify Documents Function begins by selecting all unconverted FIMA accounts payable open documents from the **Convert ACTDOC** tables (Step 1).

The function then examines these documents to see how many distinct **Government Code**s are associated with each document (Step 2). If any document has more than one **Government Code** associated with it, the function adds these documents to the Log File Error Report and updates the documents in the **Convert ACTDOC** tables with a vendor error, which requires manual correction.

If there is a single **Government Code** associated with the document, the process then examines that value to determine if it is Federal (value = "1") or Non-Federal ("0") (Step 3). If any documents have a **Government Code** not equal to either of those two values then those documents are also added to the Log File Error

Report and marked in **Convert ACTDOC** (**CONV_ACTDOC**) for manual correction.

If the vendor is Federal, the function then examines these documents to see how many distinct **Country Code**s are associated with each document (Step 4). The value of the document's **Country Code** is used to determine the Federal government agency associated with a document. If any document has more than one **Country Code** associated with it, the function adds these documents to the Log File Error Report and updates the documents in the **Convert ACTDOC** tables with a vendor error for manual correction.

The function then examines these documents to see how many distinct **Terminal Codes** are associated with each document (Step 5). The value of the document's **Terminal Code** is used to identify the originating ASC of a document. If any document has more than one **CFS Payment Office Code** (See Table 1, Section 4.4.1.2) associated with it, the function adds these documents to the Log File Error Report and updates the documents in the **Convert ACTDOC** tables with a vendor error for manual correction.

If a document successfully passes these validations and its vendor is Federal, then the function calls the Identify Federal Vendor Function (Function 3). If the document's vendor is Non-Federal, then the function calls the Identify Non-Federal Vendor Function (Function 4). This is Step 6 of the function.

2.3 Business Rules for the Identify Documents Function

- Obligation and invoice documents in CFS require a valid vendor in order to approve the document.
- Valid vendor information in NPS 2000 is not required until a payment is made against the document. Obligation transactions may not have valid vendor information. The vendor is only entered or validated at the point of payment.

2.4 Input to the Identify Documents Function

The input to the Identify Documents Function are all unconverted FIMA accounts payable open documents which exist on **Convert ACTDOC** (**CONV_ACTDOC**), except for Grants open documents (Document Type '04').

2.5 Identify Documents Processing

2.5.1 Evaluate **Government Code** on Document (Sub-Function 1)

2.5.1.1 Input

The input for this sub-function are the **Convert ACTDOC** tables.

2.5.1.2 Logic

This query selects the **Document Type** and **Document Number** from the **Convert ACTDOC** tables for all unconverted FIMA accounts payable open documents that have more than one distinct value in the **Government Code** column.

For each document returned by the query, the **Error Flag** and **Vendor Error Flag** on **Convert ACTDOC** (**CONV_ACTDOC**) are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table to indicate that the vendor cannot be identified and validated because multiple **Government Codes** are associated with the document.

2.5.1.3 Output

The documents returned by the query are updated on the **Convert ACTDOC** tables, and the Log File Error Report is updated to reflect the findings made for those documents (Sub-Function 6).

2.5.2 Validate **Government Code** Attached (Sub-Function 2)

2.5.2.1 Input

The input for this sub-function are the **CONVERT ACTDOC** tables.

2.5.2.2 Logic

This query selects the **Document Type** and **Document Number** from the **Convert ACTDOC tables** for all unconverted FIMA accounts payable open documents that have a **Government Code** with a value other than "0" or "1".

For each document returned by the query, the Error Flag and Vendor Error Flag on the Convert ACTDOC tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the Conversion Errors table (CONV_ERRORS) to indicate that the vendor cannot be identified and validated because an invalid Government Code is associated with the document.

2.5.2.3 Output

The documents returned by the query are updated on the **Convert ACTDOC** tables, and the Log File Error Report is updated to reflect the findings made for those documents (Sub-Function 6).

2.5.3 Evaluate Country Code on Document (Sub-Function 3)

2.5.3.1 Input

The input for this sub-function are the **Convert ACTDOC** tables.

2.5.3.2 Logic

This query selects the **Document Type** and **Document Number** from the **Convert ACTDOC tables** for all unconverted FIMA accounts payable open documents that have more than one distinct **Country Code** value associated with the document and are associated with a Federal vendor.

For each document returned by the query, the Error Flag and Vendor Error Flag on the Convert ACTDOC tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the Conversion Errors table (CONV_ERRORS) to indicate that the vendor cannot be identified and validated because multiple Country Codes are associated with the document.

2.5.3.3 Output

The documents returned by the query are updated on the **Convert ACTDOC** tables, and the Log File Error Report is updated to reflect the findings made for those documents (Sub-Function 6).

2.5.4 Evaluate **Terminal Code** on Document (Sub-Function 4)

2.5.4.1 Input

The input for this sub-function are the **Convert ACTDOC** tables.

2.5.4.2 Logic

This query selects the **Document Type** and **Document Number** from the **Convert ACTDOC** tables for all unconverted FIMA accounts payable open documents that have more than one distinct **CFS Payment Office Code** associated with the document.

For each document returned by the query the Error Flag and Vendor Error Flag on the Convert ACTDOC tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the Conversion Errors table (CONV_ERRORS) to indicate that the vendor cannot be identified and validated because multiple Terminal Codes are associated with the document.

2.5.4.3 Output

The documents returned by the query are updated on the **Convert ACTDOC** tables and the Log File Error Report is updated to reflect the findings made for those documents (Sub-Function 6).

2.5.5 Determine Vendor Type (Sub-Function 5)

This sub-function contains the query that provides the rest of the module with the data required to validate the vendor. For each row returned by this sub-function, the subsequent functions of the module run until they reach their respective endpoints.

2.5.5.1 Input

The input for this sub-function are the **Convert ACTDOC** tables.

2.5.5.2 Logic

This query selects the **Document Type, Document Number, Government Code**, **Terminal Code**, and **Country Code** from the **Convert ACTDOC** tables for all unconverted FIMA accounts payable open documents, except for Grants Documents (**Document Type** = '04'), that have not been flagged with an error during the vendor identification and validation process (**Vendor_Error_Flag** = 'N').

The data returned by the query is stored in local variables for use by subsequent functions of the module.

For each row returned by the query, the sub-function evaluates the value of the **Government Code** to determine if the vendor for the document is Federal (code = "1") or Non-Federal (code = "0"). If the vendor is Federal, then the module continues its processing by proceeding to the Identify Federal Vendor Function (Function 3). If the vendor is Non-Federal, the module continues its processing by invoking the Identify Non-Federal Vendor Function (Function 4).

The sub-function also checks every column returned for each document returned by the query, and if any of the columns contain a null value, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate that the vendor cannot be identified and validated because required columns for identification and validation are null.

2.5.5.3 Output

If any of the columns selected by the query for a document contain a null value, the row is updated on the **Convert ACTDOC** tables to note an error with the document, and the Log File Error Report is updated to reflect the findings made for the document (Sub-Function 6). If the document successfully completes its processing without any null values selected in this function, the sub-function inserts the selected data into local variables and the module continues on to either Function 3 or Function 4.

3 <u>Identify Federal Vendor Function (Function 2)</u>

3.1 Purpose of the Identify Federal Vendor Function

The Identify Federal Vendor Function, which encompasses Steps 3 and 5 of the module's process flow from Section 1.3, is designed to take Federal vendor information from unconverted FIMA accounts payable open documents and identify and validate that information against data existing in CFS.

3.2 Process Flow of the Identify Federal Vendor Function

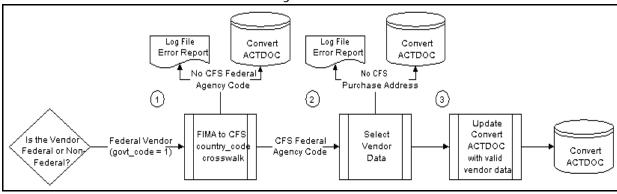


Figure 3. Identify Federal Vendor Function Process Flow

The Identify Federal Vendor Function is called when a document passes through the Identify Document Function and its associated vendor is found to be a Federal agency. Using the FIMA **Country Code** passed to it from the Identify Documents Function it selects the **CFS Federal Agency Code** (Step 1). The function then selects the associated vendor's identification information for a valid purchase address from the CFS **VENDOR DETAIL** table using the **Federal Agency Code** (Step 2). After successfully selecting the vendor's data, the function updates the **Convert ACTDOC** tables (Step 3).

3.3 Input to the Identify Federal Vendor Function

The input to the Identify Federal Vendor Function is documents passed to the function from the Identify Documents Function. These documents are associated with vendors which are Federal agencies.

3.4 Identify Federal Vendor Processing

3.4.1 FIMA to CFS Country Code Crosswalk (Sub-Function 1)

3.4.1.1 Input

The input to this sub-function is the **Country Code** for each document that passes through the Identify Documents Function and whose associated vendor is determined to be a Federal agency.

3.4.1.2 Logic

This query selects the **CFS Value** from the *CFS TO FIMA ACCOUNTING CODES SCREEN (FIM002)* where the **Country Code** found in the Identify Documents Function matches the **FIMA Code** in the screen, the **FIMA Accounting Code** has a value of "FAC", and the **Active Status** of the code is "Y". The **CFS Value** selected is used as the **Federal Agency Code** in subsequent sub-functions.

If no active vendor information can be found on the table for the document, the Error Flag and Vendor Error Flag on the Convert ACTDOC tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the Conversion Errors table (CONV_ERRORS) to indicate that a Federal Agency Code for an active CFS vendor cannot be found, and the subfunction then updates the Log File Error Report.

3.4.1.3 Output

The output of this sub-function is the CFS **Federal Agency Code** for the vendor associated with the input document.

3.4.2 Select Vendor Data (Sub-Function 2)

3.4.2.1 Input

The input to this sub-function is the **Federal Agency Code** that was selected in Sub-Function 1.

3.4.2.2 Logic

This query selects the CFS address identification information (**Vendor Id** and **Vendor Number**) for the vendor found in Sub-Function 1 if that vendor has an active, valid purchase address on the *VENDOR DETAIL SCREEN* (*PM002*) in CFS. If there is data found on the table where the **Federal Agency Code** equals the data selected in Sub-Function 1; the value of the **Active Status** is "Y"; the value of the **Address Type** equals "PURCH"; and the address is the most recent active address on record, then the vendor has valid data in CFS. The **Vendor Id** and **Vendor Number** are then inserted into local variables. Sub-Function 3 is then called to perform the update of the **Convert ACTDOC** tables for the vendor.

If a valid purchase address cannot be found for the vendor, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate the type of error that occurred in this subfunction. If a valid address cannot be found, the sub-function performs a check to determine if any kind of address exists for the vendor, valid or not. The row inserted into **CONV_ERRORS** should reflect what sort of data, if any, exists for the vendor. The sub-function then updates the Log File Error Report.

If no data is found for the vendor, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate the type of error that occurred in this sub-function. The sub-function updates the Log File Error Report.

Note: See Appendix B for information on a change to this process.

3.4.2.3 Output

The output of this sub-function is the <u>vendor number</u> and <u>vendor id</u> or an error code indicating that no vendor data or only invalid vendor data was found for the vendor.

3.4.3 Update the **Convert ACTDOC** tables with Valid Vendor Data (Sub-Function 3)

3.4.3.1 Input

The input for this sub-function is the <u>vendor number</u> and <u>vendor id</u> that need to be inserted into the **Convert ACTDOC** tables.

3.4.3.2 Logic

This sub-function performs an update statement on the **Convert ACTDOC** tables which sets the value of **Vendor Number** equal to the value of <u>vendor id</u> where **Document Number** equals <u>document number</u> and **Document Type** equals <u>document type</u>.

3.4.3.3 Output

The output of this sub-function is an identified and validated vendor on the **Convert ACTDOC tables**.

- 4 <u>Identify Non-Federal Vendor Function (Function 4)</u>
- 4.1 Purpose of the Identify Non-Federal Vendor Function

The purpose of the Identify Non-Federal Vendor Function, which encompasses Steps 4 and 5 of the module's process flow from Section 1.3, is to identify and validate non-Federal vendors associated with unconverted FIMA accounts payable open documents. The function uses vendor information from NPS 2000, FIMA, and CFS Production to determine the correct vendor to be used when the document is converted from FIMA into CFS. The function selects the **Vendor TIN** from the NPS 2000 MASTER TRANSACTION file and VENDOR file using the FIMA **Document Type** and **Document Number**. The **Vendor TIN** selected provides a link to a CFS vendor with a valid purchase address in the *CFS VENDOR DETAIL SCREEN*. Once the function has selected a valid vendor, it updates the **Convert ACTDOC** tables with the address identification information for the vendor.

WASC Master 3 Is the Vendor Log File Error Report Log File Error Report Trans, and Federal or Non-Vendor Federal? Convert MASC ACTDOO No valid Vendor Number or Vendor ID found in CFS No valid Vendor Non-Federal Purchase Address Trans, and Vendor (govt_code = 0) (2) (4) Files Record Vendor TIN CASC Retrieue Validate Evaluate Based on Master Vendor Number Select Vendor Vendor Terminal Terminal Trans, and Number and Purchase Vendor TIN Vendor ID Code Code Vendor ID Address EASC Master Update Convert ACTDOC Trans and with valid Vendor data Vendor HQ Master Trans, and Convert ACTDOO

4.2 Process Flow of the Identify Non-Federal Vendor Function

Figure 4. Identify Non-Federal Vendor Function Process Flow

The Identify Non-Federal Vendor Function is called when a document passes through the Identify Document Function (Function 2) and its associated vendor is found to be a Non-Federal entity. The function must first determine which Administrative Service Center (ASC) the document originated in, based on the document's Terminal Code (Step 1). Then the NPS 2000 MASTER TRANSACTION file and VENDOR file of the originating ASC is queried to retrieve the Vendor TIN of the associated vendor (Step 2). Once the Vendor TIN is successfully retrieved, the function records the data on the CONVERT ACTDOC tables (Step 3) and matches the Vendor TIN with the CFS Fein Number to select the Vendor Number and Vendor ID in CFS (Step 4). The function then validates the vendor by checking for the most recent valid purchase address in the CFS VENDOR DETAIL SCREEN (Step 5). After successfully identifying and validating the vendor's data, the function updates the Convert ACTDOC tables (Step 6).

4.3 Input to the Identify Non-Federal Vendor Function

The input to the Identify Federal Vendor Function is documents passed to the function from the Identify Documents Function. These documents are associated with Non-Federal vendors.

4.4 Identify Non-Federal Vendor Function Processing

4.4.1 Evaluate **Terminal Code** (Sub-Function 1)

4.4.1.1 Input

The input for this sub-function is the <u>terminal code</u> for the document selected in the Identify Documents Function.

4.4.1.2 Logic

The sub-function crosswalks the value of the <u>terminal code</u> to the name of the originating ASC of the document. The value of the terminal code is matched to the corresponding ASC according to the table shown below. The name of the originating ASC is stored in a local variable, <u>asc name</u>, for usage in the Select **Vendor TIN** sub-function (Sub-Function 2).

Table 1. FIMA Terminal Code Data Mapping		
FIMA Terminal Code	CFS Payment Office Code	
1	HQS	
2	HQS	
3	WASC	
4	MASC	
5	EASC	
6	WASC	
7	HQS	
8	HQS	
9	CASC	
10	HQS	

4.4.1.3 Output

The output of this sub-function is the name of the originating ASC for the document.

If the value of the <u>terminal code</u> local variable does not match one of the FIMA **Terminal Code**s listed in the table, the **Error Flag** and **Vendor Error**

Flag on the Convert ACTDOC tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the Conversion Errors table (CONV_ERRORS) to indicate that the vendor cannot be identified and validated because an invalid value for the Terminal Code is stored on the document.

4.4.2 Select **Vendor TIN** (Sub-Function 2)

4.4.2.1 Input

The input for this Sub-Function is the **Document Type** and **Document Number** selected in the Identify Documents Function, and <u>asc name</u>, the local variable storing the name of the document's originating ASC selected in Sub-Function 1.

4.4.2.2 Logic

Based on the <u>asc name</u> local variable, determine which ASC's set of NPS 2000 files to query. Each of the five queries uses the same set of criteria to select the **Vendor TIN**; only the file names are different. The queries compare the **Doc_Type** and **Doc_No** columns of the most recent transaction on the NPS 2000 <u>MASTER TRANSACTION</u> file to the <u>document type</u> and <u>document number</u> local variables. The sub-function then compares the **Vendor** column on NPS 2000 <u>MASTER TRANSACTION</u> file to the **Vendor Code** column on the NPS 2000 <u>VENDOR</u> file, and selects the value in the **Vend_SSN_EIN** column of the last transaction for the document in the NPS 2000 <u>VENDOR</u> file. A valid **Vend_SSN_EIN** is required before the module can compare it to CFS. The value selected is stored in a local variable as the <u>vendor tin</u>. Because of how the **Vendor TIN** is formatted it is necessary to remove all dashes (-) and alphabetic characters from the value of the column before storing it in the vendor tin local variable.

If no **Vendor TIN** is found for the document, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate that a **Vendor TIN** cannot be found for the document in this sub-function, and the sub-function then updates the Log File Error Report.

4.4.2.3 Output

The output of this sub-function is the NPS 2000 vendor tin.

4.4.3 Record **Vendor TIN** (Sub-Function 3)

4.4.3.1 Input

The input for this sub-function is the <u>vendor tin</u> local variable selected in Sub-Function 2.

4.4.3.2 Logic

This sub-function updates the **Convert ACTDOC** tables when a **Vendor TIN** is successfully selected in Sub-Function 2. Using the **Document Type** and **Document Number** selected in the Identify Documents Function, the subfunction sets the **Vendor TIN** column on the **Convert ACTDOC** tables equal to the vendor tin local variable selected in Sub-Function 2.

4.4.3.3 Output

The document's row on the **Convert ACTDOC** tables is updated to include the **Vendor TIN**.

4.4.4 Retrieve **Vendor Number** and **Vendor ID** (Sub-Function 4)

4.4.4.1 Input

The input for this sub-function is the <u>vendor tin</u> local variable selected in Sub-Function 2.

4.4.4.2 Logic

This sub-function selects the **Vendor Number** and **Vendor ID** from the **VENDOR DETAIL** table in CFS by matching the <u>vendor tin</u> selected in Sub-Function 2 to the **Fein Number**, where the value of the **Active Status** column is "Y"; the value of the **Address Type** column is "PURCH"; and the address for the vendor is the most recent address on record. Because of how the **Fein Number** is formatted, it is necessary to remove all dashes (-) and alphabetic characters from the value of the column before the comparison against the <u>vendor tin</u>. The data returned by these variables is inserted into local variables.

If a valid purchase address cannot be found for the vendor, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate the type of error that occurred in this subfunction. If a valid address cannot be found, the sub-function performs a check to determine if any kind of address exists for the vendor, valid or not. The row inserted into **CONV_ERRORS** should reflect what sort of data, if any, exists for the vendor. The sub-function then updates the Log File Error Report.

If no data is found in the query, the **Error Flag** and **Vendor Error Flag** on the **Convert ACTDOC** tables are updated to indicate that an error has occurred during the identification and validation of the document's vendor. A row is also inserted into the **Conversion Errors** table (**CONV_ERRORS**) to indicate the type of error that occurred in this sub-function, and the sub-function then updates the Log File Error Report.

Note: See Appendix B for information on a change to this process.

4.4.4.3 Output

The output of this sub-function is the CFS **Vendor Number** and **Vendor ID** for the vendor associated with the input document.

4.4.5 Record Vendor Data on the **Convert ACTDOC** tables (Sub-Function 5)

4.4.5.1 Input

The input for this sub-function is the <u>vendor number</u> and <u>vendor id</u> local variable selected in Sub-Function 4.

4.4.5.2 Logic

This sub-function updates the **Convert ACTDOC** tables when a vendor's **Vendor Number** and **Vendor ID** are successfully selected in Sub-Function 4. Using the **Document Type** and **Document Number** selected in the Identify Documents Function, the sub-function sets the **Vendor Number** and **Vendor ID** columns on the **Convert ACTDOC** tables equal to the <u>vendor number</u> and vendor id local variables selected in Sub-Function 4.

4.4.5.3 Output

The document's row on the **Convert ACTDOC** tables is updated to include the **Vendor Number** and **Vendor ID**.

4.5 Identify Non-Federal Vendor Function Processing Issues

Currently, in CFS is not able to handle Document Type 26, PCS Travel Documents, due to the fact that this Document Type can have more than one vendor associated with a document. The approach to deal with this Document Type is outline in Appendix A, but could be subject to change if CFS is changed to handle these documents.

5 Overall Risks

 Documents without vendors will require manual updates. Conversion could be impacted if there is not appropriate participation with the Conversion Team in this effort.

6 Core Financial System (CFS) Set-Up

Vendors need to be prepared and set up in CFS Production in order for this module to be able to use the data for identification and validation.

7 Overall Issues

- There are currently two PCS Travel documents (**Document Type 26**) in FIMA **ACTDOC** that have a **Government Code** of "1". This signifies the associated vendors are Federal Agencies. The CD&C Team needs to understand the implications of this situation on the current program module design.
 - Issue Owner: CAMS Design & Conversion Team
- The approach for identifying and validating PCS travel document vendors has not been resolved. Currently no approach in CFS currently exists for handling PCS travel documents. See Appendix A for a description of the current approach taken with regard to PCS Travel Documents.

Issue Owner: CAMS Design & Conversion Team

- WASC has reported that the NPS 2000 vendor database has invalid vendor codes due to the fact that deletion of vendor codes was not allowed. The CD&C Team must identify the impact of this situation. <u>Issue Owner</u>: Conversion Action Team
- The CD&C Team must determine whether a reliable CFS vendor address can be identified for the vendor TIN from the NPS 2000 vendor file. Issue Owner: Conversion Action Team
- Estimated Accrual functionality will be modified for the AP Standard Interface to require a vendor *payment* address for No-Match transactions. This modification affects the FIMA to CFS automated accounts payable open document conversion of No-Match documents. See Appendix B for the current approach to handle this issue.

 Issue Owner: CAMS Design and Conversion Team
- A current CFS workaround to handle changing vendor situations (e.g., company buyouts, changing company name, etc.) has been to create another vendor number for the same vendor TIN. The CD&C Team must understand the impact of this workaround. Issue Owner: Conversion Action Team
- The Conversion Action Team should consider an alternate method of matching vendor information with a document that must be converted. Issue Owner: Conversion Action Team

8 Assumptions

- Any document with an associated Federal vendor and more than one **Country Code** is invalid and will not be validated.
- Any document with more than one **Terminal Code** is invalid and will not be validated.
- Any document with a **Government Code** other than Federal or Non-Federal is invalid and will not be validated.
- Any vendor stored in NPS 2000 that does not have a **Vendor TIN** is invalid and will not be validated.

- Valid purchase addresses for vendors have an Active Status of "Y" and an Address Type of "PURCH" in the CFS VENDOR DETAIL table. If a vendor does not have a valid purchase address, it will not be validated. If there are multiple purchase addresses with an Active Status of "Y", then the most recent active purchase address is used for the vendor.
- Any vendor associated with a PCS travel document that can be matched to NOAA employee were vendor_type on vendor_control are 'EMPLOY', 'EMPRMB', and 'NOCORP'.

Appendix A

PCS Travel Documents

PCS (Permanent Change of Station) Travel Documents (**Document Type** "26") requires a specific process in order to select the proper vendor for identification and validation. The only way a vendor for a PCS travel document will be validated is if that vendor is the NOAA employee who is the traveler associated with the document. The **Vend SSN EIN** is matched with the **Fein Number** on **VENDOR DETAIL** and **VENDOR CONTROL** where the address is the most recent active record for the vendor, the correct type of address is selected based on the document's matching, and the **Vendor Type** is one of three values: 'EMPLOY', 'EMPRMB', or 'NOCORP'.

If the match is successful, then the identification and validation process continues as normal for the vendor. If no match can be made with the NOAA Employee records, then the vendor for the document cannot be validated. The Error Flag and Vendor Error Flag on the Convert ACTDOC tables are updated to "Y" to reflect the error, and a row is inserted into the Conversion Errors table (CONV_ERRORS) stating that an employee could not be found as the vendor for a PCS travel document.

This validation is only required for documents associated with Non-Federal vendors and occurs after the **Vendor TIN** has been selected from the <u>MASTER TRANSACTION</u> and <u>VENDOR</u> files.

Appendix B

Vendor Address Changes

Due to new information regarding how CFS handles payments and payment addresses, this module must change how it identifies and validates the vendor(s) associated with each document. If the document is a Two-Way Match document, CFS requires that a purchase address be added for the vendor. To handle this requirement, the module selects the most recent, active **Purchase Vendor ID** and **Vendor Number** on **VENDOR_DETAIL** and **VENDOR_CONTROL** in CFS. If the document is a No-Match document, CFS only requires a payment address to be added for the vendor, meaning that the module only selects the most recent, active **Payment Vendor ID** and **Vendor Number**.

For the selection of the **Purchase Vendor ID**, the criteria for the queries described in Sections 3.4.2.2 and 4.4.4.2 will remain the same, but now in Sections 3.4.3.2 and 4.4.5.2 the module updates the **Purchase Vendor ID** column on **CONV_ACTDOC** with the data selected. The module selects the **Payment Vendor ID** where the document's data can be tied to a row on **VENDOR DETAIL** and **VENDOR_CONTROL** that has an **Address Type** of 'PAYMNT'; an **Active Status** of 'Y'; and is the most recent row added to the table.

A crosswalk table will need to be created to store each document type and its associated type of matching. Data related to the document type that is required by other conversion modules will also be stored on this table. The columns needed for the table are FIMA Document Type, CFS Document Type, and CFS Matching Type. Appendix C shows each document type that needs to be inserted into the table and its associated data.

Appendix C

FIMA to CFS Document Matching Matrix

The table below identifies how FIMA Document Types will be converted to CFS. Based on FIMA accounts payable document processing, an accrual, an undelivered order, or both may be required in CFS. The FIMA Document Type column lists every accounts payable Document Type present in the FIMA DTYPE table. FIMA Document Types 50-59 are excluded from the table since these document types require a manual conversion effort. The CFS Document Type column lists the CFS Document Type that corresponds to each FIMA Document Type. This value will appear in the Document Type field on the Purchase Order Transaction Screen when the document is converted. The Description column is the document title from the FIMA DTYPE table corresponding to each FIMA Document Type. Finally, the CFS Matching column indicates whether the FIMA Document Type will be converted as a Two-Way match or No-Match document. A Two-Way match document requires a Purchase Order and may or may not require an Estimated Accrual. A No-Match document requires only an Estimated Accrual.

Table 2. FIMA Document Matching Matrix				
FIMA Document Type	CFS Document Type	Description	CFS Matching	
01	CONV01	Purchase Orders	Two-Way	
02	CONV02	Blanket Purchase Order	Two-Way	
03	CONV03	Contracts - Non-recurring	Two-Way	
04	CONV04	Grants	Separate conversion effort	
05	CONV05	Recurring Contracts - Not more than 1 FY	Two-Way	
06	CONV06	Contracts for Continuing Services	No-Match	
07	CONV07	Job Orders (GSA 1354)	Two-Way	

Table 2. FIMA Document Matching Matrix			
FIMA Document Type	CFS Document Type	Description	CFS Matching
08	CONV08	Requests for Training (NOAA 53 - 1)	Two-Way
09	CONV09	Printing Requisitions (CD-10)	Two-Way
12	CONV12	Purchase Order/Invoice/Voucher (SF-44)	No-Match
13	CONV13	Fedstrips/Milstrips	Two-Way
14	CONV14	Bankcard Purchases	Two-Way.
19	CONV19	Misc. Certified Invoices	No-Match
20	CONV20	Travel Orders	Currently no strategy exists for converting travel advances.
23	CONV23	Government Bills of Lading	Two-Way
26	CONV26	Travel Order -PCS	Two-Way
27	CONV27	Foreign Travel Order	Currently no strategy exists for converting travel advances.
29	CONV29	Invoices for Other Travel & Transport	Motorpool -Will determine by working with the Design/Conver sion team (consider the role of the new interface).

Table 2. FIMA Document Matching Matrix			
FIMA Document Type	CFS Document Type	Description	CFS Matching
30	CONV30	Reimb. Vouchers - Agent Cashier	No-Match
31	CONV31	Reimb. Vouchers - Other	No-Match
33	CONV33	Vouchers Related to Contract Observers	No-Match
35	CONV35	Foreign Trainee Vouchers (SF-1034)	Two-Way
36	CONV36	Service Station Delivery Tickets/Invoice	No Match
38	CONV38	Vouchers for Commuted Subsistence	No Match
40	CONV40	Purchase Order - One Time Vendor Pymt	Two-Way
41	CONV41	Purchase Order - Advance Pymt	Two-Way
42	CONV42	Purchase Order - CyclicPymts	Two-Way
43	CONV43	Purchase Order - Recurring Payments	Two-Way
49	CONV49	Other Misc. Vouchers & Claims	Two-Way